GOVERNMENT OF INDIA
POWER
LOK SABHA

UNSTARRED QUESTION NO:1908
ANSWERED ON:05.05.2016
Water Consumption by Coal Based Power Plants
Owaisi Shri Asaduddin

Will the Minister of POWER be pleased to state:

(a) whether the Government has assessed the impact of setting up of the coal based power plants in areas which face severe water scarcity into the country;

(b) if so, the details thereof;

(c) whether it is a fact that more than 40 per cent of India"s proposed coal based power plants are likely to double the country"s water consumption;

(d) if so, the details thereof;

(e) whether the Greenpeace International has observed that most of the States in the country are likely to bear the brunt of water shortage due to construction of the proposed coal based power plants; and

(f) if so, the remedial steps being taken by the Government in this regard?

Answer

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL AND NEW & RENEWABLE ENERGY

(SHRI PIYUSH GOYAL)

(a) to (e) : Government has not separately assessed the impact of setting up of the coal based power plants in areas which face severe water scarcity into the country. Allocation of water for Thermal Power Projects is done by Water Resources Deptt. of the concerned State Government Department where the project is located and they assess all factors before allocation of water.

Report of Greenpeace International has not been examined in this Ministry.

(f) : Consumptive water requirement for thermal power plants with closed cycle system used to be about 7 m3/MWh input, which has been optimized by various technological interventions and water conservation practices. At present, the typical total consumptive water requirement in a closed cycle system for a thermal power plant has been brought down to 3m3/MWh.

The water conservation measures and technology interventions adopted by Thermal Power Plants are as follows :
â€¢ Dry Ash Handling System.
â€¢ Ash Water Recirculation System. (AWRS)
â€¢ Zero water discharge system.
â€¢ High Concentration Slurry System. (HCSS)
â€¢ Most of inland thermal power plants use closed cycle cooling water system with Cooling Tower and high level of Cycle of Concentration (COC) to recirculate the water in operation for reducing the water requirement.
With a view to further reduce water consumption in Thermal Power Plants, Ministry of Environment, Forest & Climate Change (MOEF&CC), vide notification dated 07.12.2015, has issued Environment (Protection) Amendment Rules 2015 where in the standards for water consumption for thermal power plants have been stipulated. As per the notification, the total consumptive water requirement in a closed cycle system for a thermal power plant has been brought down to 2.5m3 /MWh for new plants, to be installed after 1st January 2017.

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